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## **Armstrong**

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# (54) SEND CRYPTOGRAPHIC CURRENCY TO EMAIL ADDRESS

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- (51) **Int. Cl. G06Q 20/06** (2012.01) **G06Q 20/36** (2012.01)
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- (58) Field of Classification Search
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(Continued)

#### (56) References Cited

#### U.S. PATENT DOCUMENTS

2,634,738 A 5,884,274 A 4/1953 Fuller et al. 3/1999 Walker et al. (Continued)

#### FOREIGN PATENT DOCUMENTS

EP 2634738 A1 9/2013 JP 2007-109002 A 4/2007 WO 2014190323 A1 11/2014

#### OTHER PUBLICATIONS

"Send Bitcoins to Email Addresses!", Jan. 9, 2012, downloaded from https://web.archive.org/web/20120109084110/http://www.bitcoinmail.com/, merged and attached as PDF file, 'NPL' (Year: 2012).\*

#### (Continued)

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ABSTRACT

A system and method for transaction bitcoin is described. Bitcoin can be sent to an email address. No miner's fee is paid by a host computer system. Hot wallet functionality is provided that transfers values of some Bitcoin addresses to a vault for purposes of security. A private key of a Bitcoin address of the vault is split and distributed to keep the vault secure. Instant exchange allows for merchants and customers to lock in a local currency price. A vault has multiple email addresses to authorize a transfer of bitcoin out of the vault. User can opt to have private keys stored in locations that are under their control. A tip button rewards content creators for their efforts. A bitcoin exchange allows for users to set prices that they are willing to sell or buy bitcoin and execute such trades.

### 12 Claims, 76 Drawing Sheets

